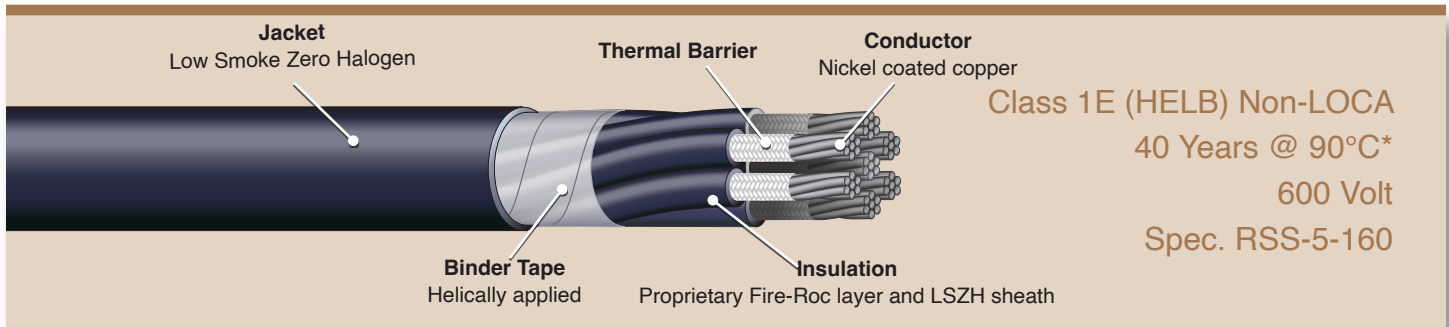


# Firezone® 3HR

## 3 Hour Fire Resistance

# FIREZONE®



### Applications

- NFPA 805
- Appendix R

### Features

- Meets the requirements of UL 2196 Fire Resistive Cable Standard as a 3 Hour “Electrical Circuit Integrity System”
- Nuclear Class 1E (HELB) Non-LOCA
- 40 year life at 90°C continuous conductor temperature
- Low Smoke, Halogen Free design
- Extremely flame retardant
- No special tools, connectors, or procedures
- Printed number coding allows for easy circuit identification
- Available in long lengths
- Easily pulled (low friction jacket)
- Moisture Resistant
- Manufactured under Appendix B program

### Performance Standards

- 3-hour fire resistance in accordance with UL 2196, following the ASTM E119 Time Temperature Curve.
- Installation per RSCC TR-1210
- 10 CFR 50 Appendix B quality assurance program
- Class 1E HELB non-LOCA qualified to IEEE 383-1974 and IEEE 323-1974 (RSCC Report QR-1302)
- Passes FT-4/IEEE 1202 70,000 BTU/hr vertical tray flame test
- Passes IEEE 383-1974 70,000 BTU/hr vertical tray flame test as modified by NRC Reg. Guide RG 1.131. Non-aged and thermal & radiation aged.
- For use in wet and dry locations to 90°C
- Sunlight Resistant
- Passes IEEE 1210 for Polywater® Lubricants CLR, Dyna Blue™, LZ, and G

### Construction

**Conductor:** Stranded, nickel coated copper

**Thermal Barrier:** Inorganic layer

**Insulation:** Proprietary low smoke zero halogen Fire-Roc layer

**Insulation Covering:** Low smoke zero halogen covering

**Circuit ID:** ICEA Method 3: Black single conductors with printed numbers and color name, following K-1 sequence

**Binder Tape:** Helically applied

**Jacket:** Black low smoke zero halogen polyolefin (Colors Available)

### Scope

Firezone® 3HR is a unique zero halogen cable which offers superior fire endurance capabilities. Firezone® 3HR is suitable for use in circuits where the maintenance of circuit integrity is an absolute necessity to allow the operation of systems or equipment vital to life or safety under emergency conditions. Firezone® 3HR is the cable solution that helps maintain the critical electrical link between essential equipment during a 3 hour ASTM E119 fire event. It can be used for power or control circuits.

\* Rated 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

# Firezone® 3HR

## 3 Hour Fire Resistance

# FIREZONE®



Class 1E (HELB) Non-LOCA  
 40 Years @ 90°C\*  
 600 Volt  
 Spec. RSS-5-160

### Multi-Conductor Control Cable

Product Code	Conductor Size	Number of Conductors	Jacket Thickness (Mils)	Nominal Diameter (inch)	Net Weight (Lbs/1,000 ft)
C67-1021	12 AWG	2	60	0.660	220
C67-1031	12 AWG	3	60	0.700	270
C67-1041	12 AWG	4	60	0.770	330
C67-1071	12 AWG	7	80	0.965	540
C67-1091	12 AWG	9	80	1.125	670
C67-1121	12 AWG	12	80	1.270	830
C67-2021	10 AWG	2	60	0.740	290
C67-2031	10 AWG	3	60	0.790	360
C67-2041	10 AWG	4	80	0.910	500
C67-2071	10 AWG	7	80	1.090	760
C67-2091	10 AWG	9	80	1.275	940
C67-2121	10 AWG	12	80	1.440	1200

### Three Conductors – Power

Product Code	Conductor Size	Jacket Thickness (Mils)	Nominal Diameter (inch)	Net Weight (Lbs/1,000 ft)
P75-0083	8 AWG	80	1.01	600
P75-0063	6 AWG	80	1.10	770
P75-0043	4 AWG	80	1.25	1030
P75-0023	2 AWG	80	1.42	1490
P75-0103	1/0 AWG	80	1.82	2450
P75-0203	2/0 AWG	110	1.92	2800
P75-0303	3/0 AWG	110	1.97	3180
P75-0403	4/0 AWG	110	2.25	3950

### Individual Conductors Utilized in Firezone® 3HR Multi-Conductor Power & Control Cables

Conductor Size	Max DCR @ 20°C (Ohms/1,000 ft)	Conductor Stranding	Insulation Thickness (Mils)	Jacket Thickness (Mils)	Nominal Diameter (inch)
12 AWG	2.5500	19/.0179"	45	15	0.265
10 AWG	1.6000	49/.0142"	45	15	0.306
8 AWG	0.9300	133/.0113"	60	30	0.389
6 AWG	0.5890	133/.0142"	60	30	0.435
4 AWG	0.3710	133/.0179"	60	30	0.505
2 AWG	0.2400	665/.01"	60	30	0.580
1/0 AWG	0.1500	1045/.01"	80	45	0.770
2/0 AWG	0.1200	1330/.01"	80	45	0.783
3/0 AWG	0.0954	1665/.01"	80	45	0.812
4/0 AWG	0.0756	2107/.01"	80	45	0.944